

INFORMATION TECHNOLOGY, GAME DEVELOPMENT, ASSOCIATE IN APPLIED SCIENCE (ITGD)

Effective: Fall 2016

The Game Development specialization is intended to prepare students for a career or further study in game development. Courses emphasize the specific skills necessary for the design, development, marketing and testing of computer games. Industry standard programming languages and development tools are utilized in this specialization.

The Associate in Applied Sciences in the Information Technology (IT) Career Degrees at Delaware County Community College blends the theoretical with the practical. Students are offered a choice of specializations: Computer Programming, Game Development, Help Desk/Technical Support, Interactive Multimedia, Network Engineering, Mobile Computing and Web Development. Students have the benefit of classroom or online instruction, dedicated laboratory facilities and participation in co-curricular activities. Students in the IT Career Degrees are required to take program courses and related electives in their specialization as well as four IT core courses. In addition, students are required to take general education courses.

Program Outcomes

- Demonstrate the use of web and programming languages relevant to game development.
- Apply the computer video game development process to create games using a variety of current tools and technologies.
- Create computer games using industry standard development tools.
- Utilize industry standard tools to create audio and/or visual elements.
- Develop a game portfolio.

Curriculum

First Semester	Hours
CS 100 Introduction to Information Technology	3
CS 117 Fundamentals of Game Design Theory and Practice	3
CS 101 Introduction to Computer Science	3
ENG 100 English Composition I	3
Select one of the following:	3-4
MAT 120 Modern College Mathematics	
MAT 121 Introduction to Probability and Statistics	
MAT 135 Business Precalculus	
MAT 151 College Algebra	
MAT 160 Calculus I	
Hours	15-16
Second Semester	Hours
IMM 120 Web Page Design and Development	3
CS 118 Game Creation Development	3
ENG 112 English Composition II: Writing About Literature	3
CS 104 Introduction to Java Programming or CS 110 Introduction to C++	3
Mathematics Elective	3-4
Hours	15-16
Third Semester	Hours
CS 119 Introduction to Computer Game Programming	3

NET 110	Network Communications	3
IMM 201	Audio and Video for Multimedia	3
CS 106 or IMM 110	Art and Animation or Multimedia Graphics & Design	3
CS 204 or CS 210	Intermediate Java Programming or Object Oriented C++	3
Hours		15
Fourth Semester		
CS 250	Digital Portfolio Development	3
Any transferable Scientific Inquiry (SI) designated Science course		4
Humanities Elective		3
Any transferable Oral Communication (OC) designated course		3
Any transferable Diversity and Social Justice (DJ) and Global Understanding (GU) designated Social Science course		3
Hours		16
Total Hours		61-63

Notes

Scientific Inquiry designated courses (https://catalog.dccc.edu/academic-programs/college-academic-learning-goals/#SR_Course_List).

Oral Communication designated courses (https://catalog.dccc.edu/academic-programs/college-academic-learning-goals/#OC_Course_List).

Diversity and Social Justice and Global Understanding designated courses (https://catalog.dccc.edu/academic-programs/college-academic-learning-goals/#Dual_DJ_GU_CourseList).

Humanities Elective - Career Program

This list does not indicate College Academic Learning Goal designation (<https://catalog.dccc.edu/academic-programs/college-academic-learning-goals/>). Refer to your program curriculum for more information.

For career programs:

Code	Title	Hours
Courses listed under subject areas:		
ARB 101	(or above)	3
ART 100	Art and Child Development (or above)	3
COMM 100	Interpersonal Communication (or above)	3
DRA 100	Introduction to Theatre (or above)	3
ENG 112	English Composition II: Writing About Literature (or above)	3
FRE 101	Elementary French I (or above)	3
GER 101	(or above)	3
HUM 100	Introduction to Visual Arts (or above)	3
ITA 101	(or above)	3
MUS 101	Fundamentals of Music (or above)	3
PHI 100	Introduction to Philosophy (or above)	3
SPA 101	Elementary Spanish I (or above)	3

Mathematics Elective:

Code	Title	Hours
Select from one of the following sequences:		
MAT 120 & MAT 121	Modern College Mathematics and Introduction to Probability and Statistics	6

MAT 135 & MAT 136	Business Precalculus and Business Calculus	6
MAT 151 & MAT 152	College Algebra and Precalculus	8
MAT 160 & MAT 161	Calculus I and Calculus II	8

Career

Career Information for this Program

Information Technology, Game Development

Career Coach

Browse or search for careers and we will give you relevant data on wages, employment, and the training you need.

DCCC Career and Counseling Services

Faculty and staff in Career & Counseling Services are eager to help you become successful in college and in life. We offer services to assist you at any point in your academic journey and we tailor our approach to meet your individual needs.